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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/799,177	03/12/2004	David Spencer Pearson	BBNT-P01-015	8150
28120	7590	09/04/2008	EXAMINER	
ROPS & GRAY LLP			SONG, HOSUK	
PATENT DOCKETING 39/41			ART UNIT	PAPER NUMBER
ONE INTERNATIONAL PLACE			2135	
BOSTON, MA 02110-2624				
		MAIL DATE		DELIVERY MODE
		09/04/2008		PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/799,177	PEARSON ET AL.	
	Examiner	Art Unit	
	HOSUK SONG	2135	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 18 June 2008.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-5 and 12-25 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-5, 12-26 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.

4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.

5) Notice of Informal Patent Application

6) Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-5,12-26 are rejected under 35 U.S.C. 101 because the subject matter is directed to non-statutory subject matter.

Claims 1-5: The invention as claims does not pertain to a tangible product. For such claims to be statutory they must be embodied within a tangible computer medium such as hard drives or some other computer hardware form.

Claim 12-17,19,21-24: Claims does not produce a useful, concrete and tangible result.

Determining link metrics associated with each of the quantum cryptographic links based on the respective number of secret key bits exchanged with the each of the neighboring nodes is not sufficient to satisfy the requirements of USC 101 requiring the a process produce a useful, concrete and tangible result. A useful, concrete and tangible result must be specifically recited in the claim. Further, the invention as claims does not pertain to a tangible product. For such claims to be statutory they must be embodied within a tangible computer medium such as hard drives or some other computer hardware form.

Claim 18: Determining link metrics associated with each of the quantum cryptographic links based on the respective number of secret key bits exchanged with the each of the neighboring nodes is not sufficient to satisfy the requirements of USC 101 requiring the a process produce a useful, concrete and tangible result. A useful, concrete and tangible result must be specifically recited in the claim.

Claim 20: Claim recites a system for determining link metrics of quantum cryptographic links connecting a node to neighboring nodes in a quantum cryptographic key distribution network. Claimed system must include a hardware necessary to realize any of the functionality of the claimed neighboring nodes and produce a useful, concrete and tangible result. Absent recitation of such hardware as part of the

claimed system, it is considered non-statutory. A useful, concrete and tangible result must be specifically recited in the claim.

Claims 25-26: Claims does not produce a useful, concrete and tangible result. A useful, concrete and tangible result must be specifically recited in the claim.

Response to Amendment

The previous grounds of rejection based on the Phoenix and Cotter patents are withdrawn in view of Applicant's Amendment filed 6/18/08. However, examiner has discovered new issue during the examination. Please see new rejection above.

USPTO Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HOSUK SONG whose telephone number is 5712723857. The examiner can normally be reached on mon-fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, KIM VU can be reached on 5712723859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Art Unit: 2135

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/HOSUK SONG/
Primary Examiner, Art Unit 2135

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	10/799,177	PEARSON ET AL.
Examiner	Art Unit	
HOSUK SONG	2135	